

RAW SEQUENCE LISTING

DATE: 08/22/2001

PATENT APPLICATION: US/09/304,967A

TIME: 13:13:38

Input Set : A:\04646-1.app

Output Set: N:\CRF3\08222001\I304967A.raw

3 <110> APPLICANT: Lomonossoff, George P.
 4 Johnson, John E.
 5 Bendig, Mary
 6 Jones, Tim
 7 Longstaff, Marian
 9 <120> TITLE OF INVENTION: Modified Plant Viruses as Vectors of Heterologous
 10 Peptides
 12 <130> FILE REFERENCE: DOW-04646
 14 <140> CURRENT APPLICATION NUMBER: 09/304,967A
 15 <141> CURRENT FILING DATE: 1999-05-05
 17 <150> PRIOR APPLICATION NUMBER: 08/471,048
 18 <151> PRIOR FILING DATE: 1995-06-06
 20 <150> PRIOR APPLICATION NUMBER: 08/612,858
 21 <151> PRIOR FILING DATE: 1996-03-12
 23 <150> PRIOR APPLICATION NUMBER: 08/137,032
 24 <151> PRIOR FILING DATE: 1993-03-18
 26 <150> PRIOR APPLICATION NUMBER: PCT/GB20/00589
 27 <151> PRIOR FILING DATE: 1992-04-02
 29 <160> NUMBER OF SEQ ID NOS: 123
 31 <170> SOFTWARE: PatentIn Ver. 2.0
 33 <210> SEQ ID NO: 1
 34 <211> LENGTH: 120
 35 <212> TYPE: DNA
 36 <213> ORGANISM: Cowpea mosaic virus
 38 <400> SEQUENCE: 1
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 40 cctgtcccat tttcagacgt tacagcagta acttttgact taatcaacgg caaaataact 120
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 43 <211> LENGTH: 40
 44 <212> TYPE: PRT
 45 <213> ORGANISM: Cowpea mosaic virus
 47 <400> SEQUENCE: 2
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 49 1 5 10 15
 51 Ala Ser Thr Pro Pro Ala Pro Phe Ser Asp Val Thr Ala Val Thr Phe
 52 20 25 30
 54 Asp Leu Ile Asn Gly Lys Ile Thr
 55 35 40
 58 <210> SEQ ID NO: 3
 59 <211> LENGTH: 27
 60 <212> TYPE: PRT
 61 <213> ORGANISM: Foot-and-mouth disease virus
 63 <400> SEQUENCE: 3
 64 Ser Thr Tyr Ser Arg Asn Ala Val Pro Asn Leu Arg Gly Asp Leu Gln
 65 1 5 10 15
 67 Val Leu Ala Gln Lys Val Ala Arg Thr Leu Pro
 68 20 25

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71 <210> SEQ ID NO: 4
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73 <212> TYPE: DNA
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76 <400> SEQUENCE: 4
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78 aaaaggttgc tcggactctt c 81
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 81
82 <212> TYPE: DNA
83 <213> ORGANISM: Foot-and-mouth disease virus
85 <400> SEQUENCE: 5
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87 ccaacgagcc tgagaaggat c 81
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 52
91 <212> TYPE: PRT
92 <213> ORGANISM: Foot-and-mouth disease virus
94 <400> SEQUENCE: 6
95 Gly Pro Val Cys Ala Glu Ala Ser Asp Val Tyr Ser Pro Cys Met Ile
96 1 5 10 15
98 Ala Ser Thr Tyr Ser Arg Asn Ala Val Pro Asn Leu Arg Gly Asp Leu
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101 Gln Val Leu Ala Gln Lys Val Ala Arg Thr Leu Pro Ser Thr Pro Pro
102 35 40 45
104 Ala Pro Phe Ser
105 50
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 156
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111 <213> ORGANISM: Foot-and-mouth disease virus
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115 agtagaaatg ctgttcctaa tttgagagga gatcttcaag ttttggtctca aaaggttgct 120
116 cggactcttc ctagactcc tcctgctcca ttttca 156
118 <210> SEQ ID NO: 8
119 <211> LENGTH: 52
120 <212> TYPE: PRT
121 <213> ORGANISM: Foot-and-mouth disease virus
123 <400> SEQUENCE: 8
124 Tyr Ser Pro Cys Met Ile Ala Ser Thr Tyr Ser Arg Asn Ala Val Pro
125 1 5 10 15
127 Asn Leu Arg Gly Asp Leu Gln Val Leu Ala Gln Lys Val Ala Arg Thr
128 20 25 30
130 Leu Pro Ser Thr Pro Pro Ala Pro Phe Ser Asp Val Thr Ala Val Thr
131 35 40 45
133 Phe Asp Leu Ile
134 50
137 <210> SEQ ID NO: 9

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144 gatcttcaag ttttggtca aaagggtgct cggactcttc ctgactcc tcctgctcca 120
145 ttttcagacg ttacagcagt aacttttgac ttaatc 156
147 <210> SEQ ID NO: 10
148 <211> LENGTH: 156
149 <212> TYPE: DNA
150 <213> ORGANISM: Foot-and-mouth disease virus
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154 ctagaagttc aaaaccgagt tttccaacga gcctgagaag gatcgtgagg aggacgaggt 120
155 aaaagtctgc aatgtcgtca ttgaaaactg aattag 156
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159 <212> TYPE: PRT
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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167 1 5 10 15
169 Ala Val Thr Phe Asp Leu Ile
170 20
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175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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183 gacttaatc 69
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186 <211> LENGTH: 69
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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195 gacttaatc 69
197 <210> SEQ ID NO: 14
198 <211> LENGTH: 21
199 <212> TYPE: PRT
200 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:

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203 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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 207 1 5 10 15
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 210 20
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 214 <211> LENGTH: 67
 215 <212> TYPE: DNA
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 218 <220> FEATURE:
 219 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 221 <400> SEQUENCE: 15
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 225 <210> SEQ ID NO: 16
 226 <211> LENGTH: 59
 227 <212> TYPE: DNA
 228 <213> ORGANISM: Artificial Sequence
 230 <220> FEATURE:
 231 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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 245 Gly Pro Val Cys Ala Glu Ala Ser Asp Val Tyr Ser Pro Cys Met Ile
 246 1 5 10 15
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 252 35 40 45
 255 <210> SEQ ID NO: 18
 256 <211> LENGTH: 141
 257 <212> TYPE: DNA
 258 <213> ORGANISM: Artificial Sequence
 260 <220> FEATURE:
 261 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 263 <400> SEQUENCE: 18
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 265 cgccctgagg gcatcgagg agagggcgg gagcgcgatc gtgatcgttc ggacgtcaca 120
 266 gcagtaactt ttgacttaat c 141
 268 <210> SEQ ID NO: 19
 269 <211> LENGTH: 16
 270 <212> TYPE: PRT

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271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
276 <400> SEQUENCE: 19
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284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
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289 <400> SEQUENCE: 20
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293 <211> LENGTH: 44
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295 <213> ORGANISM: Artificial Sequence
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298 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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319           35           40
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323 <211> LENGTH: 126
324 <212> TYPE: DNA
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335 <210> SEQ ID NO: 24
336 <211> LENGTH: 39
337 <212> TYPE: PRT
338 <213> ORGANISM: Foot-and-mouth disease virus

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VERIFICATION SUMMARY

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